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| 10/677,862  | 10/02/2003  | Anthony Scott Oddo   | SEDN/PRED113        | 4611             |
| 56015 7590 10/28/2008<br>PATTERSON & SHERIDAN, LLP/<br>SEDNA PATENT SERVICES, LLC<br>595 SHREWSBURY AVENUE<br>SUITE 100<br>SHREWSBURY, NJ 07702 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| SAWAGED, SARI S   |             |                      |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/677,862

**Applicant(s)**

ODDO ET AL.

**Examiner**

SARI SAWAGED

**Art Unit**

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**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

***Response to Arguments***

1. Applicant's arguments with respect to claims 16-36 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 31 and 35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The applicant states that **"a control signal indicative of viewing a television program is deemed to be associated with a personal video recorder operation if the control signal immediately follows two consecutive control signals indicative of viewing television programs deemed to be associated with a user activated control unit."** The examiner understands the claim to mean that if the user issues three consecutive volume changes or channel changes (signals indicative of viewing a television program), the last control signal would be determined to be associated with a PVR as claimed in claims 31 and 35. The examiner fails to find support for this claim in the disclosure of the application. Appropriate action is required.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**5. Claims 16, 19-33, and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schlack et al. (hereinafter referred to as Schlack) (of record) in view of Plotnick et al. (hereinafter referred to as Plotnick) (US Pub No. 2008/0040740).**

**Claim 16:**

Schlack discloses a method for generating a viewing recommendation comprising:

Parsing dynamically (see “dynamically determine which viewer is watching television at any given time”, col. 7 lines 10-12; “dynamically updating a viewers profile” based on events, col. 17 lines 15-24; “period of inactivity used to determine a new session...may be dynamically configurable” col. 25 lines 19-21), in accordance with a set of stored processing rules (“heuristic rules 298” col. 13 lines 15-18, col. 20 lines 33-38) a stream of command signals associated with a user activated control unit, information representative of the viewer’s viewing

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behavior (see "commands" col. 11 lines 34-37; "channel changes, volume changes, EPG activity...." col. 13 lines 2-4; and "remote control" col. 17 lines 15-24), wherein the parsing comprises interpreting at least one signal from the stream of command signals based on the viewer profile (interpreting channel changes and liked or disliked content based on the viewer profile, col. 17 lines 1-52);

Updating dynamically the viewer profile of the viewer based on the generated information representative of the viewer's viewing behavior (see col. 7 lines 10-19 and col. 17 lines 15-19); and

Determining, based on the viewer's profile at least one viewing recommendation (see targeted content, col. 36 lines 51-55).

Schlack doesn't disclose "to determine which command signals are associated with a user activated control unit and which control signals are associated with a personal video recorder operation"

Plotnick, an inventor from the same or a similar field discloses inserting targeted alternative advertisements when control signals associated with a personal video recorder (STB PVR, [0153]) operation (such as fast forward, rewind, skip, and pause events, see [0170]) are received. Plotnick's invention inherently "determines which command signals are associated with a user

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activated control unit and which control signals are associated with a personal video recorder operation" because the alternative advertisements are inserted only during trick play events as opposed to user activated control unit command signals (channel changes and volume changes, [0159]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of "parsing dynamically, in accordance with a set of stored processing rules, a stream of command signals and using command signals associated with a user activated control unit, information representative of the viewer's viewing behavior, wherein the parsing comprises interpreting at least one signal from the stream of command signals based on the viewer profile; updating dynamically a viewer profile of the viewer based on the generated information representative of the viewer's viewing behavior; and determining, based on the viewer profile at least one viewing recommendation" of Schlack with the method of "determining which command signals are associated with a user activated control unit and which control signals are associated with a personal video recorder operation" of Plotnick because it would allowed head-ends to insert targeted alternative advertisements during trick play events as disclosed by Plotnick.

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**Claim 19:**

Schlack discloses wherein the viewer profile comprises:

a surfing history of the viewer (see col. 17 lines 35-53).

**Claim 20:**

Schlack discloses wherein the surfing history comprises:

no more than a pre-defined number of surfing channels, each surfing channel having a corresponding total duration value (see col. 20 line 60 to col. 21 line 10),

and wherein a pre-determined number of the pre-defined number of surfing channels are designated as top surfing channels (see Fig. 25A-D and col. 22 lines 61-65; Schlack discloses a "Networks" column in Figs. 25A-B that lists surf networks "that are desirable to track". The examiner takes "desirable to track" to mean that this list is not inclusive of all surf channels but includes channels/networks that are visited most frequently and/or have the most dwell time (i.e. the top surf channels). Schlack discloses a broader list of surf channels, especially in Fig. 25D where a graph of the average channel dwell time for all networks in a given session is given. The number of surf channels shown in Fig. 25D is much larger than the surf channels shown in Fig. 25A-B, where only the "desirable to track" channels are listed).

**Claim 21:**

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As disclosed in the rejection of claim 20, Schlack discloses that the "desirable to track" networks/channels are the networks/channels that are visited most frequently and/or have the most dwell time (i.e. the top surf channels). Schlack discloses a broader list of surf channels, especially in Fig. 25D where a graph of the average channel dwell time for all networks in a given session is given. The number of surf channels shown in Fig. 25D is much larger than the surf channels shown in Fig. 25A-B, where only the "desirable to track" channels are listed.

Schlack discloses combining the viewer's viewing time of each surfing channel (dwell time) during a predefined period of time (a session) (combined dwell time shown in Fig. 25B as "2570") and col. 23 lines 14-21, where a session can be a specific window of time or day-part (see col. 6 lines 60-64).

**Claim 22:**

Schlack discloses wherein a surfing channel having the total duration value below a pre-defined threshold is removed from the surfing history (see fig. 25D and col. 23 lines 54-55; Schlack discloses a channel surf history in a viewing session in Fig. 25D. Schlack discloses the dwell time is represented in seconds (col. 23 lines 54-55). Channels having dwell times of less than one second threshold are not included in fig. 25D. The examiner understands this to mean that channels that don't have dwell times of at least one second are not "surf channels" (the viewer is not interested in programming offered on these channel and is merely changing the channel using the "channel up" or "channel down" to



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tune to a surf channel (a channel that may have desirable programming, therefore having a dwell time of 1 second or more) or to a top channel (see Fig. 20)).

**Claim 23:**

Schlack discloses wherein the parsing further comprises:

“determining, according to the set of stored processing rules, a viewing event”  
(see col. 13 lines 15-18, col. 20 lines 33-38);

and “if a duration of the viewing event is below a pre-defined surfing threshold, adjusting the total duration value of a surfing channel in the surfing history, wherein the surfing channel is a channel of the viewing event” (see figs. 24 and 25B col. 23 lines 34-50; Schlack differentiates between viewing events and surf events. Dwell times for surf events and dwell times for viewing events are separate. The surf “Total Dwell Times” in fig. 25B correspond to “total duration value of a surfing channel in the surfing history” as disclosed by the inventor. If a viewing event is below the threshold that Schlack uses to differentiate a viewing event as in fig. 24 then the surf “Total Dwell Times” column is adjusted.)

**Claim 24:**

Schlack discloses determining “at least one viewing event according to the set of stored processing rules” (see col. 13 lines 15-18, col. 20 lines 33-38).

**Claim 25:**

Schlack discloses "a program probability score corresponding to the at least one relevant viewing event" (Fig. 18 shows a program probability score that a man, woman, or child corresponds to a viewing event). Schlack also uses probability to determine what type of viewer is viewing programming at certain times during a session or throughout a day (Fig. 18B) and goes on to state that his invention is not limited to distinguishing three viewer types but can use additional sets of rules and probabilities, which in conjunction with viewer interactivity data (profiles), can be used to infer viewer demographics and other attributes. Other sets of rules and probabilities could also be utilized without departing from the scope of the present invention (col. 19 line 56 to col. 20 line 59).

It is inherent that probability (program) scores stored in a viewer profile to have a value between 0 and 1 and that the sum off all the probability (program) scores in a profile must equal 100% or 1.

**Claim 26:**

As discussed in the rejection of Claim 25, Schlack discloses program probability scores that are not limited to distinguishing three viewer types but can use additional sets of rules and probabilities, which in conjunction with viewer interactivity data (profiles), can be used to infer viewer demographics and other attributes. Other sets of rules and probabilities could also be utilized without

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departing from the scope of the present invention (col. 19 line 56 to col. 20 line 59).

Schlack further discloses adjusting a first program probability score (probability score that a man is watching an action movie) based on a current viewing weight of a correlating viewing event (the day part that the action movie is playing) as shown in Figures 18A-18C and discussed in col. 20 lines 1-59). Adjusting at least a second program probability score (that a woman or child is watching the action movie at that day part) so that the sum of all program probability scores stored in the viewer profile equal 1 is inherent because the sum of all probabilities must equal to 1 and any probability score must fall between 0 and 1.

**Claim 27:**

Schlack discloses at least one genre probability score corresponding to the at least one viewing event (see fig 18A; figure 18 A shows a program (genre) probability score than a man, woman, or child corresponds to the viewing event). Sum of all the genre scores in the viewer profiles equals 1 as shown in Fig. 18A where the genre of Action: Movie among all the profiles for the genders would add to 1.

**Claim 28:**

Schlack discloses genre probability scores as shown in Fig. 18A. Further, Schlack discloses adjusting a first genre probability score based on a current

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viewing event weight (the probability weight based on the gender of the viewer watching that genre fig. 18A and the day part that the program is airing Fig. 18B). adjusting at least the second genre probability score so a sum of all program probability scores stored in the viewer profile equals 1 is inherent because the sum of all probabilities must equal to 1 and any probability score must fall between 0 and 1.

**Claims 29 and 30:**

Schlack discloses "deleting data about the parsed stream of command signals from a television viewing personalization system" and "deleting data about the at least one viewing event from a television viewing personalization system" (Schlack discloses deleting session data and profiles which would inherently include data about the parsed stream of command signals (likes, dislikes, and viewing habits) and deleting data about at least one viewing event, col. 31 line 39 to col. 32 line 31).

**Claim 31:**

Schlack discloses that control signals indicative of viewing a television program associated with a remote control are indicative of user activity (see col. 25 lines 9-21).

**Claim 32:**

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Schlack discloses wherein a control signal indicative of viewing a television program is deemed to be associated with a user activated control unit if the control signal indicative of viewing a television program is followed by another control signal within a pre-defined time period (Schlack discloses that control signals indicative of viewing a television program are deemed to be associate with a user activated remote control unit if the control signals are followed by another control signal within a viewing session, where a session can be a specific window of time or day-part (see col. 6 lines 60-64).

**Claim 33:**

Schlack discloses a system (disclosed in Fig. 2B) for generating a viewing recommendation (targeted content or favorite programs listed first in EPG, col. 36 lines 51-55) comprising:

A parsing means (shown as "viewer characterization and profiling system 290" in Fig. 2B), in accordance with a set of stored processing rules ("heuristic rules 298" col. 13 lines 15-18, col. 20 lines 33-38) a stream of command signals associated with a user activated control unit, information representative of the viewer's viewing behavior (see "commands" col. 11 lines 34-37; "channel changes, volume changes, EPG activity...." col. 13 lines 2-4; and "remote control" col. 17 lines 15-24), wherein the parsing comprises interpreting at least one signal from the stream of command signals based on the viewer profile (interpreting channel

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changes and liked or disliked content based on the viewer profile, col. 17 lines 1-52);

A viewing commendation generating module comprising means for dynamically determining at least one viewing recommendation based on the generated information, wherein the means for determining at least one viewing recommendation are in communication with the parsing means is inherent to Schlack's invention because Schlack discloses customizing the viewing environment (i.e., favorite programs listed first in EPG, format of EPG) or targeting content such as advertisements or PPV events or VOD programming to the viewers based on the viewer profiles (see col. 51-55). The system is dynamic because it can update user profiles dynamically and it can also dynamically determine which viewer is watching the television (and inherently customize the recommendations (favorite programs listed in the EPG or targeted content) to that viewer (see "dynamically determine which viewer is watching television at any given time", col. 7 lines 10-12; "dynamically updating a viewers profile" based on events, col. 17 lines 15-24; "period of inactivity used to determine a new session...may be dynamically configurable" col. 25 lines 19-21).

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Schlack doesn't disclose "to determine which command signals are associated with a user activated control unit and which control signals are associated with a personal video recorder operation"

Plotnick, an inventor from the same or a similar field discloses inserting targeted alternative advertisements when control signals associated with a personal video recorder (STB PVR, [0153]) operation (such as fast forward, rewind, skip, and pause events, see [0170]) are received. Plotnick's invention inherently "determines which command signals are associated with a user activated control unit and which control signals are associated with a personal video recorder operation" because the alternative advertisements are inserted only during trick play events as opposed to user activated control unit command signals (channel changes and volume changes, [0159]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of "parsing dynamically, in accordance with a set of stored processing rules, a stream of command signals and using command signals associated with a user activated control unit, information representative of the viewer's viewing behavior, wherein the parsing comprises interpreting at least one signal from the stream of command signals based on the viewer profile; updating dynamically a viewer profile of the viewer based on the generated information representative of the

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viewer's viewing behavior; and determining, based on the viewer profile at least one viewing recommendation" of Schlack with the method of "determining which command signals are associated with a user activated control unit and which control signals are associated with a personal video recorder operation" of Plotnick because it would allowed head-ends to insert targeted alternative advertisements during trick play events as disclosed by Plotnick.

**Claim 35:**

Schlack discloses that control signals indicative of viewing a television program associated with a remote control are indicative of user activity (see col. 25 lines 9-21).

**Claim 36:**

Schlack discloses wherein a control signal indicative of viewing a television program is deemed to be associated with a user activated control unit if the control signal indicative of viewing a television program is followed by another control signal within a pre-defined time period (Schlack discloses that control signals indicative of viewing a television program are deemed to be associate with a user activated remote control unit if the control signals are followed by another control signal within a viewing session, where a session can be a specific window of time or day-part (see col. 6 lines 60-64).



**6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schlack in view of Plotnick in further view of Ellis et al. (hereinafter referred to as Ellis) (US Pub. No. 2002/0174430).**

**Claim 17:**

Schlack and Plotnick disclose the method for generating a viewing recommendation which includes "to determine which command signals are associated with a user activated control unit and which control signals are associated with a personal video recorder operation", wherein a control signal indicative of viewing a television program (trick play events) are deemed to be associated with a PVR operation.

However, neither Schlack nor Plotnick disclose wherein a control signal indicative of viewing a television program for **substantially an exact scheduled time** is deemed to be associated with a personal video recorder operation.

Ellis discloses an interactive television application integrated in a STB/PVR that automatically tunes to a program (control signal indicative of viewing a television program, as shown in the applicants specification on page 8 lines 8-10)) scheduled to be recorded.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method for generating a viewing recommendation of Schlack and Plotnick with the method wherein a control signal indicative of viewing a television program for substantially an exact scheduled time is deemed to be associated with a personal video recorder operation because it would have enabled for the targeting of advertisements as in Schlack and Plotnick on when the viewer was actually present.

**7. Claims 18 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schlack in view of Plotnick in further view of Williamson et al. (hereinafter referred to as Williamson) (US 2003/0208767).**

**Claim 18:**

Schlack and Plotnick disclose the method for generating a viewing recommendation as discussed in the rejection of Claim 16.

Neither Schlack nor Plotnick disclose that wherein a control signal indicative of a power event is not a command signal associated with a user activated control unit.

Williamson, an inventor from the same or a similar field, discloses a method wherein a device may have a control signal indicative of a power event that is not

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a command signal associated with a user activated control unit (a device has auto power on and power off timers, see [0117]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of generating viewing recommendations of Schlack and Plotnick with a control signal indicative of a power event that is not a command signal associated with a user activated control unit because it would have allowed a viewer to automatically power on a device at a desired wake up time in the morning as disclosed by Williamson (see [0117]).

**Claim 34:**

Schlack and Plotnick disclose the television viewing personalization system of claim 33.

Neither Schlack nor Plotnick disclose that wherein a control signal indicative of a power event is not a command signal associated with a user activated control unit.

Williamson, an inventor from the same or a similar field, discloses a method wherein a device may have a control signal indicative of a power event that is not a command signal associated with a user activated control unit (a device has auto power on and power off timers, see [0117]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of generating viewing recommendations of Schlack and Plotnick with a control signal indicative of a power event that is not a command signal associated with a user activated control unit because it would have allowed a viewer to automatically power on a device at a desired wake up time in the morning as disclosed by Williamson (see [0117]).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARI SAWAGED whose telephone number is (571)270-5085. The examiner can normally be reached on Mon-Thurs, 9:00AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ANDREW KOENIG can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sari Sawaged/  
Examiner, Art Unit 2423

/Andrew Y Koenig/  
Supervisory Patent Examiner, Art Unit 2423